Speakman Company

Delaware Manufacturing Extension Partnership

Value Stream Mapping Pays Off at Speakman Company

Client Profile:
Founded in 1869 as a small plumbing and steam fitting shop, Speakman Company has become a manufacturer of showerheads, faucets and safety equipment found in homes, hospitals, education institutions, government buildings and factories across the U.S. Speakman also makes specialty showers with a timed shutoff for the U.S. Navy's fleet. The company employs 200 people at its facility in New Castle, Delaware.

Situation:
The balance among Speakman's product lines provides the company with some built-in stability: Shower products account for about 40 percent of annual revenues, while plumbing solutions and safety equipment average about 30 percent. With stiff competition and a supply chain that extends across the U.S. into Asia, it takes astute planning to order the right parts far enough ahead so finished products are ready when distributors and retailers want them. The company faced its own challenges when it moved from an aging 210,000-square-foot factory into a 65,000-square-foot facility, prompting a shift from the traditional assembly-line system to modular cell-based manufacturing. Recognizing the importance of getting good advice on how to transform its manufacturing processes, Speakerman turned to the Delaware Manufacturing Extension Partnership (DEMEP), a NIST MEP network affiliate, for help.

Solution:
DEMEP conducted training program on the principles of Lean to get key people "up to speed on what Lean is all about and why they should care," said John Barone, DEMEP's manufacturing specialist. DEMEP offered a Kaizen event designed to introduce the concepts of cell manufacturing, a process in which workers are organized into teams of two or three people performing a specific function. Using groups of small cells rather than one long assembly line gave Speakman added flexibility in product assembly. In a traditional process, it would take a full line of six or more people, each performing a specific task, to assemble a shower head. With cells, a two-person team performs most assembly steps for a particular type of shower head; then the assembled heads are moved along to another cell for packaging. The cell system also helps overcome downtime related to employee absenteeism; if a couple of people are out, it might shut down a cell but it won't cripple the entire assembly process. Two years after the move into the new plant, Speakman called on DEMEP again, this time to help with realigning the warehousing and manufacturing areas of the plant to create a U-shaped product flow. Parts are kept on one side of the U; at the base of the U are three groups of manufacturing cells (one each for showerheads, safety and plumbing solutions). On the other side of the U are packaging and shipping areas. Assembly workers in their cells concentrate on putting units together; they notify workers in the warehouse area when they have to bring more parts to their cells. All the materials needed for packaging are kept along the wall behind the packaging workers. "We've eliminated a lot of personnel movement, and a lot of unnecessary product movement," said Mark Puzzo, Speakman's

Supply Chain Manager. DEMEP also helped the company assess its purchasing practices and offered training in meeting ISO 9001 quality standards. These improvements have led to increased production, reduced inventory and less waste.

Results:
* Increased sales by $15 million.
* Increased production from 1 showerhead per day to 10 units daily.

Testimonial:
"DEMEP showed us how to get the most out of cellular manufacturing. John Barone of DEMEP gives us new ideas and alerts us to excellent training opportunities. The more you see of Lean, the less mystical it becomes."

Mark Puzzo, Supply Chain Manager